

COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled ENZYMATICALLY ACTIVE RECOMBINANT GLUCOCEREBROSIDASE

_____ the specification of which
_____ is attached hereto.

X was filed on December 23, 1988 as Application

Serial No. 289,589 and was amended on _____

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56 (a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:
Prior Foreign Application(s):

(Number)	(Country)	(Day/Month/Year Filed)	Yes	No
(Number)	(Country)	(Day/Month/Year Filed)	Yes	No
(Number)	(Country)	(Day/Month/Year Filed)	Yes	No

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: Paul T. Clark, Esq., Reg. No. 30,162

Richard J. Warburg, Reg. No. 32,327

Address all telephone calls to Paul T. Clark, Esq. at telephone no. (617) 542-5070

Address all correspondence to Paul T. Clark, Esq., Fish & Richardson, Suite 2500,
One Financial Center, Boston, MA 02111-2658

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Full name of sole or first inventor James Rasmussen

Inventor's signature James Rasmussen Date: 3/20/89

Residence 24 Mount Vernon Street, #401, Boston, Massachusetts 02108

Citizenship U.S.A.

Post Office Address 24 Mount Vernon Street, #401, Boston, Massachusetts 02108

Full name of second inventor Gary Barsomian

Inventor's signature Gary Barsomian Date: 3-17-89

Residence 68 Jewett Street, Georgetown, Massachusetts 01830

Citizenship U.S.A.

Post Office Address 68 Jewett Street, Georgetown, Massachusetts 01830

ADDITIONAL INVENTORS

Full name of inventor Michael Bergh
Inventor's signature Michael Bergh Date: March 31, 1989
Residence 19 Benjamin Road, Belmont, Massachusetts 02178
Citizenship Netherlands
Post Office Address 19 Benjamin Road, Belmont, Massachusetts 02178

Full name of inventor _____
Inventor's signature _____ Date: _____
Residence _____
Citizenship _____
Post Office Address _____

Full name of inventor _____
Inventor's signature _____ Date: _____
Residence _____
Citizenship _____
Post Office Address _____

Full name of inventor _____
Inventor's signature _____ Date: _____
Residence _____
Citizenship _____
Post Office Address _____

Express Mail Label No. EV386751529US

COMBINED DECLARATION AND POWER OF ATTORNEY
(Continuation or CIP Application)

As a below named inventor, I hereby declare that:
My residence, post office address and citizenship are as stated below next to my name,
I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled ENZYMATICALLY ACTIVE RECOMBINANT GLUCOCEREBROSIDASE

_____ the specification of which
_____ is attached hereto.

X was filed on December 22, 1989 as Application
Serial No. 455,507 and was amended
on _____.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56 (a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:
Prior Foreign Application(s):

(Number)	(Country)	(Day/Month/Year Filed)	Yes	No
(Number)	(Country)	(Day/Month/Year Filed)	Yes	No
(Number)	(Country)	(Day/Month/Year Filed)	Yes	No

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

<u>289,589</u> (Application Serial No.)	<u>Dec/23/88</u> (Filing Date)	<u>Pending</u> (Status) (patented, pending, abandoned)
_____ (Application Serial No.)	_____ (Filing Date)	_____ (Status) (patented, pending, abandoned)

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: PAUL T. CLARK, Reg. No. 30,162 and Mark A. Hofer, Reg. No. 30,068
Address all telephone calls to PAUL T. CLARK

at telephone no. 617-542-5070

Address all correspondence to Fish & Richardson, One Financial Center, Suite 2500
Boston, MA 02111-2658

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Full name of sole or first inventor JAMES RASMUSSEN

Inventor's signature ☒ James Rasmussen

Date: ☒ 2/16/90

Residence ~~Boston, MA 02108~~ Cambridge, MA 02142 *MR*

Citizenship U.S.A.

Post Office Address ~~24 Mount Vernon Street, Boston, MA 02108~~ 75 Cambridge Parkway, B411, Cambridge, MA 02142 *MR*

Full name of second inventor GARY BARSOMIAN

Inventor's signature ☒ Gary Barsomian

Date: ☒ 3-6-90

Residence Georgetown, MA 01830

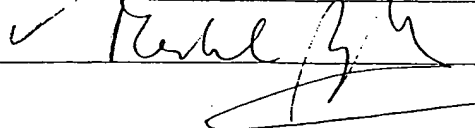
Citizenship U.S.A.

Post Office Address 68 Jewett Street, Georgetown, MA 01830

I hereby declare that all statements made herein of my own knowledge and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Full name of sole or first inventor MICHEL BERGH

Inventor's signature



Date:

2/15/90

Residence Belmont, MA 02178

Citizenship Netherlands

Post Office Address 19 Benjamin Road, Belmont, MA 02178

Full name of second inventor

Inventor's signature

Date:

Residence

Citizenship

Post Office Address

ASSIGNMENT

For valuable consideration, we, JAMES RASMUSSEN
 of Boston MA, GARY
 CITY OR TOWN STATE FIRST MIDDLE INITIAL LAST
Georgetown MA, MICHEL
 CITY OR TOWN STATE FIRST MIDDLE INITIAL LAST
Belmont MA,
 CITY OR TOWN STATE FIRST MIDDLE INITIAL LAST
 of _____;
 CITY OR TOWN STATE FIRST MIDDLE INITIAL LAST
 of _____; and _____
 CITY OR TOWN STATE FIRST MIDDLE INITIAL LAST
 of _____; hereby assign to GENZYME CORPORATION
 CITY OR TOWN STATE

_____, a Delaware
 corporation having a place of business at Framingham MA
 and its successors and assigns (collectively hereinafter called "the Assignee"),
 the entire right, title and interest throughout the world in the inventions and
 improvements which are the subject of an application for United States Patent
 Application Serial No. 455,507, filed December 22, 1989,
 entitled ENZYMATICALLY ACTIVE RECOMBINANT GLUCOCEREBROSIDASE

this assignment including said application and any and all the United States and
 foreign patents granted for any of said inventions or improvements, and the right
 to claim priority based on the filing date of said application under the International
 Convention for the Protection of Industrial Property, the Patent Cooperation
 Treaty, the European Patent Convention, and all other treaties of like purposes;
 and we authorize the Assignee to apply in all countries in our name or in its own
 name for patents and like rights of exclusion and for inventors' certificates for
 said inventions and improvements; and we agree for ourselves and our respective
 heirs, legal representatives and assigns, without further compensation to perform
 such lawful acts and to sign such further applications, assignments, Preliminary
 Statements and other lawful documents as the Assignee may reasonably request
 to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at Franklin,
MA this 16th day of February, 1990

STATE OF MASSACHUSETTS JAMES RASMUSSEN L.S.
 COUNTY OF Middlesex ss.

Before me this 16th day of February, 1990, personally appeared
JAMES RASMUSSEN known to me to be the person whose name is
 subscribed to the foregoing Assignment and acknowledged that he executed the
 same as his free act and deed for the purposes therein contained.

Notary Public

My Commission Expires: 12/12/94

[Notary's
 Seal Here]

RECEIVED 5255 FRANKLIN 42

IN WITNESS WHEREOF, I hereto set my hand and seal at Teaneck, N.J.
MA this 6 day of February, 19 90

STATE OF MA FIRST GARY MIDDLE INITIAL D LAST BARSOMIAN L.S.
COUNTY OF Middlesex SS

Before me this 6 day of February, 19 90, personally appeared
GARY BARSOMIAN known to me to be the person whose name is
subscribed to the foregoing Assignment and acknowledged that he executed the
same as his free act and deed for the purposes therein contained.

[Signature]
Notary Public

My Commission Expires: 12/31/94

[Notary's
Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at Teaneck, N.J.
MA this 15th day of February, 19 90

STATE OF MA FIRST MICHEL MIDDLE INITIAL B LAST BERGH L.S.
COUNTY OF Middlesex SS

Before me this 15 day of February, 19 90, personally appeared
MICHEL BERGH known to me to be the person whose name is
subscribed to the foregoing Assignment and acknowledged that he executed the
same as his free act and deed for the purposes therein contained.

[Signature]
Notary Public

My Commission Expires: 12/31/94

RECORDED
PATENT AND TRADEMARK
OFFICE

[Notary's
Seal Here]

MAR 16 1990

IN WITNESS WHEREOF, I hereto set my hand and seal at _____,
this _____ day of _____, 19 _____

STATE OF _____ FIRST _____ MIDDLE INITIAL _____ LAST _____ L.S.
COUNTY OF _____ SS

Before me this _____ day of _____, 19 _____, personally appeared
_____ known to me to be the person whose name is
subscribed to the foregoing Assignment and acknowledged that he executed the
same as his free act and deed for the purposes therein contained.

Notary Public

My Commission Expires:

[Notary's
Seal Here]

ASSIGNMENT

For valuable consideration, we, James Rasmussen
FIRST MIDDLE INITIAL LAST
of Boston, MA ; Gary Barsomian
CITY OR TOWN STATE FIRST MIDDLE INITIAL LAST
of Georgetown, MA ; Michael Bergh
CITY OR TOWN STATE FIRST MIDDLE INITIAL LAST
of Belmont, MA ; and GENZYME CORPORATION
CITY OR TOWN STATE FIRST MIDDLE INITIAL LAST
of _____ ; hereby assign to Delaware
CITY OR TOWN STATE
_____, a _____
corporation having a place of business at Boston, Massachusetts
and its successors and assigns (collectively hereinafter called "the Assignee"),
the entire right, title and interest throughout the world in the inventions and
improvements which are the subject of an application for United States Patent
Serial No. 289,589
filed December 23, 1988
signed by us this day, entitled ENZYMATICALLY ACTIVE RECOMBINANT
GLUCOCEREBROSIDASE

this assignment including said application and any and all the United States and
foreign patents granted for any of said inventions or improvements, and the right
to claim priority based on the filing date of said application under the International
Convention for the Protection of Industrial Property, the Patent Cooperation
Treaty, the European Patent Convention, and all other treaties of like purposes;
and we authorize the Assignee to apply in all countries in our name or in its own
name for patents and like rights of exclusion and for inventors' certificates for
said inventions and improvements; and we agree for ourselves and our respective
heirs, legal representatives and assigns, without further compensation to perform
such lawful acts and to sign such further applications, assignments, Preliminary
Statements and other lawful documents as the Assignee may reasonably request
to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at Boston,
Mass. this 20th day of MARCH, 1989.

James Rasmussen L.S.
FIRST MIDDLE INITIAL LAST

STATE OF Massachusetts

COUNTY OF Suffolk

Before me this 20th day of MARCH, 1989, personally appeared

James Rasmussen known to me to be the person whose name is
subscribed to the foregoing Assignment and acknowledged that he executed the
same as his free act and deed for the purposes therein contained.

Lawell H. M-Carter
Notary Public

My Commission Expires: Oct 3, 1991

[Notary's
Seal Here]

RECEIVED

IN WITNESS WHEREOF, I hereto set my hand and seal at Boston,

Mass. this 17 day of March, 1989

GARY BARSOMIAN L.S.
STATE OF Massachusetts
COUNTY OF SUFFOLK

Before me this 17 day of MARCH, 1989, personally appeared
Gary Barsomian known to me to be the person whose name is
subscribed to the foregoing Assignment and acknowledged that he executed the
same as his free act and deed for the purposes therein contained.

Lawell H. M. Carter
Notary Public

My Commission Expires: Oct 3, 1991

[Notary's
Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at Boston,

MASS this 31st day of MARCH, 1989

Michael Bergh L.S.
STATE OF Massachusetts
COUNTY OF SUFFOLK

Before me this 31 day of MARCH, 1989, personally appeared
Michael Bergh known to me to be the person whose name is
subscribed to the foregoing Assignment and acknowledged that he executed the
same as his free act and deed for the purposes therein contained.

Lawell H. M. Carter
Notary Public

My Commission Expires: Oct 3, 1991

[Notary's
Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at

..... this day of, 19.....

..... L.S.
STATE OF
COUNTY OF

Before me this day of, 19....., personally appeared
..... known to me to be the person whose name is
subscribed to the foregoing Assignment and acknowledged that he executed the
same as his free act and deed for the purposes therein contained.

RECORDED
PATENT & TRADEMARK OFFICE

Notary Public

APR 10 89

My Commission Expires:

Practitioner's Docket No. GC22.4CON2**PATENT****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**☒ In re application of: James, Rasmussen et al.

Application No.: Not yet assigned Group No.: Not yet assigned.

Filed: Herewith

Examiner: Not yet assigned

For: ENZYMATICALLY ACTIVE RECOMBINANT GLUCOCEREBROSIDASE

☐ Patent No*: Issued:**NOTE: Insert name(s) of inventor(s) and title also for patent.***Commissioner for Patents****P.O. Box 1450, Alexandria, VA 22313-1450****POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST
(REVOCATION OF PRIOR POWERS)**

NOTE: Submission of a Power of Attorney after issuance of the Notice of Allowance in an application does not result in a reduction in patent term adjustment under 37 C.F.R. § 1.704(c)(10). See Notice of May 29, 2001, 1247 OG 111-112, June 26, 2001.

As assignee of record of the entire interest of the above identified

☒ application,☐ patent,**REVOCATION OF PRIOR POWERS OF ATTORNEY**

all powers of attorney previously given are hereby revoked and

NEW POWER OF ATTORNEY

the following attorney(s) and/or agent(s) are hereby appointed to prosecute and transact all business in the Patent and Trademark Office connected therewith.

(list name and registration number)

Richard D. Allison	31,584
Isabelle A.S. Blundell	43,321
Robert J. Cobert	36,108
Thomas J. DesRosier	30,168
Deborah A. Dugan	37,315
Jennifer L. Dupre	41,722
Madge R. Kanter	35,211
Elizabeth Lassen	31,845
Bart G. Newland	31,282
Jennifer D. Tousignant	54,498
Y. Philip Zhang	44,372

(check the following item, if applicable)☐ Attached, as part of this power of attorney, is the authorization of the above-named attorney(s) to accept and follow instructions from my representative(s).

SEND CORRESPONDENCE TO:

Jennifer L. Dupre, Esquire
Genzyme Corporation
500 Kendall Street
Cambridge, MA 02142

DIRECT TELEPHONE CALLS TO:

(617) 768-6523
Fax (617) 252-7553

Customer No.: 24536

Genzyme Corporation

(type or print identity of assignee of entire interest)
15 Pleasant Street Connector
P.O. Box 9322

Address

Framingham, MA 01701-9322

☒ Recorded in PTO on March 16, 1990

Reel 5255

Frame 442

☒ Recorded ~~herewith~~ also on April 10, 1989.

ASSIGNEE STATEMENT

Attached to this power is a "STATEMENT UNDER 37 C.F.R. § 3.73(b)."


Signature

Date March 31, 2004

Thomas J. DesRosier

(type or print name of person authorized to
sign on behalf of assignee)

Chief Patent Counsel

Title

NOTE: The assignee of the entire interest may revoke previous powers and be represented by an attorney of his or her selection. 37 C.F.R. § 1.36.

(check the following item, if it forms a part of this power of attorney)

☐ Added page—Authorization of attorney(s) to accept and follow instructions from representative.

(Power of Attorney by Assignee of Entire Interest [12-2]—page 2 of 2)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: James Rasmussen et al.
Serial Number: Not Yet Assigned
Filing Date: Herewith
Title: ENZYMATICALLY ACTIVE RECOMBINANT
GLUCOCEREBROSIDASE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

STATEMENT UNDER 37 C.F.R. § 3.73(b)

Sir:

This Statement Under 37 C.F.R. § 3.73(b) accompanies a POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST, filed in the above-identified application concurrently herewith.

Evidence establishing that Genzyme Corporation is the assignee of the entire right, title and interest in the above-identified application, may be found in the Assignment recorded on March 16, 1990 at Reel 5255 and Frame 442 and April 10, 1989.

Evidence that the undersigned is authorized to act on behalf of Genzyme may be found in the attached SIGNATURE AUTHORITY.

Respectfully submitted,



Thomas J. DesRosier (Reg. No. 30,168)
Chief Patent Counsel
Attorney for Applicant
Genzyme Corporation
500 Kendall Street
Cambridge, Massachusetts 02142
Tel. (617) 768-6872

Dated: March 31, 2004

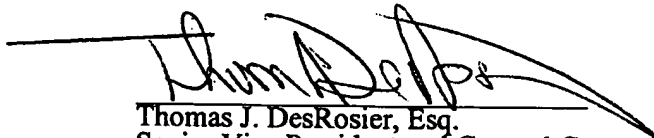


Genzyme Corporation
500 Kendall Street
Cambridge, MA 02142
Tel.: (617) 252-7500
Fax: (617) 252-7553

SIGNATURE AUTHORITY

I, Thomas J. DesRosier, Senior Vice President and General Counsel of Genzyme Corporation hereby appoint Madge R. Kanter, Richard D. Allison, Elizabeth Lassen and Bart G. Newland, all Managing Intellectual Property Counsel of Genzyme Corporation, with full power and authority to transact any and all business before the United States Patent and Trademark Office, and any foreign counterpart patent office, with the powers of a Corporate Officer of Genzyme Corporation.

Date: December 2, 2003



Thomas J. DesRosier, Esq.
Senior Vice President and General Counsel
GENZYME CORPORATION



American Type Culture Collection

12301 Parklawn Drive • Rockville, MD 20852 USA • Telephone: (301)881-2600 Telex: 898-055 ATCCNORTH

JAN - 9 1989

L. H. McCARTER

The American Type Culture Collection (ATCC) has received your deposit of a culture in connection with the filing of an application for patent. The following information is provided to fulfill Patent Office requirements.

Name and Address of Depositor: Genzyme Corporation
Attention: Michel L. E. Bergh
75 Kneeland Street
Boston, Massachusetts 02111

Deposited on Behalf of: Genzyme Corporation

Date of Receipt of Culture by the ATCC: December 22, 1988

<u>Scientific Description</u>	<u>Depositor's Reference</u>	<u>ATCC Designation</u>
<u>Escherichia coli</u> DHS alpha	pVL941.GCRD21	67866

The ATCC understands that:

1. The deposit of this culture does not grant to ATCC during the effective term of the patent anticipated, a license, either expressed or implied, to infringe the patent, and our release of this culture to others does not grant them a license, either expressed or implied, to infringe the patent.
2. If this culture should die or be destroyed during the effective life of the patent, it shall be your responsibility to replace it with a living culture of the same organism.

The ATCC agrees that in consideration for a one-time service charge, not to distribute this culture or any information relating thereto or to its deposit until such time as a patent has been issued disclosing the above deposit except in accordance with U.S. Patent Office Rule of Practice, Rule 14, or until you authorize us to make this strain available. After a patent is issued and we are so informed, the culture will be made available for distribution to the public. The ATCC agrees to maintain the culture for a period of 30 years from deposit date, or until at least five years after the most recent request for a sample, whichever is longer.

We further agree that the name and address of every requester shall be communicated to the depositor.

The culture was tested and was viable December 23, 1988.

Check in the amount of \$980.00 received. Thank you.

American Type Culture Collection

By Bobbie A. Brandon
(Mrs.) Bobbie A. Brandon, Head
ATCC Patent Depository

Date: December 27, 1988

cc: ✓ Lowell McCarter
Richard Warburg



American Type Culture Collection

12301 Parklawn Drive • Rockville, MD 20852 USA • Telephone: (301)881-2600 Telex: 898-055 ATCCNORTH

BUDAPEST TREATY ON THE INTERNATIONAL RECOGNITION OF THE DEPOSIT OF MICROORGANISMS FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

RECEIPT IN THE CASE OF AN ORIGINAL DEPOSIT ISSUED PURSUANT TO RULE 7.3 AND VIABILITY STATEMENT ISSUED PURSUANT TO RULE 10.2

To: (Name and Address of Depositor or Attorney)

Gary Barsomian
Genzyme
One Kendall Square
Cambridge, Massachusetts 02142

Deposited on Behalf of: Gary Barsomian

Identification Reference by Depositor:

ATCC Designation

Escherichia coli DH5alpha/pGB42

68194

The deposit was accompanied by: ___ a scientific description I a proposed taxonomic description indicated above.

The deposit was received December 21, 1989 by this International Depository Authority and has been accepted.

AT YOUR REQUEST:

I We will inform you of requests for the strain for 30 years.

___ We will not inform you of requests for the strain.

The strain will be made available if a patent office signatory to the Budapest Treaty certifies one's right to receive, or if a U.S. Patent is issued citing the strain.

If the culture should die or be destroyed during the effective term of the deposit, it shall be your responsibility to replace it with a living culture of the same.

The strain will be maintained for a period of at least 30 years after the date of deposit, and for a period of at least five years after the most recent request for a sample. The United States and many other countries are signatory to the Budapest Treaty.

The viability of the culture cited above was tested December 26, 1989. On that date the culture was viable.

International Depository Authority: American Type Culture Collection, Rockville, Md. 20852 USA

Signature of person having authority to represent ATCC:

Bobbie A. Brandon

(Mrs.) Bobbie A. Brandon, Head, ATCC Patent Depository

Date: December 27, 1989